



Sequenc Listing created in PatentIn.ST25  
SEQUENCE LISTING

*PL*

<110> Weigel, Paul H.  
DeAngelis, Paul  
Kumari, Kshama

<120> Hyaluronan Synthase Gene and Uses Thereof

<130> 3554.011

<140> US 09/469,200

<141> 1999-12-21

<150> US 09/178,851

<151> 1998-10-26

<150> US 60/064,435

<151> 1997-10-31

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<170> PatentIn version 3.1

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Tyr Lys Val Ala Ala Ile Ile Pro Ser Tyr Asn Glu Asp Ala Glu Ser  
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Glu Ile Tyr Val Val Asp Asp Gly Ser Ala Asp Glu Thr Gly Ile Lys

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Ile Val His Arg Ser Glu Lys Asn Gln Gly Lys Arg His Ala Gln Ala  
130 135 140

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Asp Thr Tyr Ile Tyr Pro Asp Ala Leu Glu Glu Leu Leu Lys Thr Phe  
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Asn Asp Pro Thr Val Phe Ala Ala Thr Gly His Leu Asn Val Arg Asn  
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Arg Gln Thr Asn Leu Leu Thr Arg Leu Thr Asp Ile Arg Tyr Asp Asn  
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355 360 365

Asn Ile His Tyr Met Leu Lys His Pro Leu Ser Phe Leu Leu Ser Pro  
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Phe Tyr Gly Val Leu His Leu Phe Val Leu Gln Pro Leu Lys Leu Tyr  
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Lys Ile Val Glu Phe Gln Ile Thr Lys Cys Lys Glu Lys Leu Ser Ala  
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His Pro Ser Val Asn Ser Ala His Leu Ser Val Asn Lys Glu Glu Lys  
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Val Asn Val Cys Asp Ser Pro Leu Asp Ile Ala Thr Gln Leu Leu Leu  
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Ser Asn Val Lys Lys Leu Val Leu Ser Asp Ser Glu Lys Asn Thr Leu  
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Leu Ala Cys Leu Val Asn Gln Lys Thr His Tyr Pro Phe Glu Val Ile  
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195 200 205

Tyr Glu Asn Lys Leu Asp Ile Arg Tyr Val Arg Gln Lys Asp Asn Gly  
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Phe Gln Ala Ser Ala Ala Arg Asn Met Gly Leu Arg Leu Ala Lys Tyr  
225 230 235 240

Asp Phe Ile Gly Leu Leu Asp Cys Asp Met Ala Pro Asn Pro Leu Trp  
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Val His Ser Tyr Val Ala Glu Leu Leu Glu Asp Asp Asp Leu Thr Ile  
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Glu Asp Val Glu Phe Gly Tyr Arg Leu Phe Arg Tyr Gly Ser Phe Phe  
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Glu Asn Glu Thr Asp Arg Glu Ala Gly Lys Asn Ile Thr Leu Asp Ile  
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Val Arg Ile Met Ser Lys Pro Asn Gly Gly Ile Ala Ser Ala Ser Asn  
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Asp Asp Tyr Leu Glu Pro Asp Ala Val Glu Leu Cys Leu Lys Glu Phe  
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Leu Lys Asp Lys Thr Leu Ala Cys Val Tyr Thr Thr Asn Arg Asn Val  
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Asn Pro Asp Gly Ser Leu Ile Ala Asn Gly Tyr Asn Trp Pro Glu Phe  
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Ser Arg Glu Lys Leu Thr Thr Ala Met Ile Ala His His Phe Arg Met  
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Phe Thr Ile Arg Ala Trp His Leu Thr Asp Gly Phe Asn Glu Lys Ile  
595 600 605

Glu Asn Ala Val Asp Tyr Asp Met Phe Leu Lys Leu Ser Glu Val Gly  
610 615 620

Lys Phe Lys His Leu Asn Lys Ile Cys Tyr Asn Arg Val Leu His Gly  
625 630 635 640

Asp Asn Thr Ser Ile Lys Lys Leu Gly Ile Gln Lys Lys Asn His Phe  
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Val Val Val Asn Gln Ser Leu Asn Arg Gln Gly Ile Thr Tyr Tyr Asn  
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Tyr Asp Glu Phe Asp Asp Leu Asp Glu Ser Arg Lys Tyr Ile Phe Asn  
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Asn Lys Asn Ile Phe Val Ile Val Leu His Val Asp Lys Asn His Leu  
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Thr Pro Asp Ile Lys Lys Glu Ile Leu Ala Phe Tyr His Lys His Gln  
755 760 765

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785 790 795 800

Leu Asn Leu Asn Cys Glu Tyr Ile Ile Phe Asp Asn His Asp Ser Leu  
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Phe Val Lys Asn Asp Ser Tyr Ala Tyr Met Lys Lys Tyr Asp Val Gly  
820 825 830

Met Asn Phe Ser Ala Leu Thr His Asp Trp Ile Glu Lys Ile Asn Ala  
835 840 845

His Pro Pro Phe Lys Lys Leu Ile Lys Thr Tyr Phe Asn Asp Asn Asp  
850 855 860

Leu Lys Ser Met Asn Val Lys Gly Ala Ser Gln Gly Met Phe Met Thr  
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Tyr Ala Leu Ala His Glu Leu Leu Thr Ile Ile Lys Glu Val Ile Thr  
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915 920 925

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930 935 940

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Val Leu Phe Ser Glu Leu Asn Arg Lys Arg Leu Arg Lys Trp Ile Ser  
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Leu Arg Pro Lys Gly Trp Asn Asp Val Arg Leu Ala Val Ile Ile Ala  
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Gly Tyr Arg Glu Asp Pro Tyr Met Phe Gln Lys Cys Leu Glu Ser Val

Sequence Listing created in PatentIn.ST25

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Arg Asp Ser Asp Tyr Gly Asn Val Ala Arg L u Il Cys Val Ile Asp  
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Gly Asp Glu Asp Asp Asp Met Arg Met Ala Ala Val Tyr Lys Ala Ile  
130 135 140

Tyr Asn Asp Asn Ile Lys Lys Pro Glu Phe Val Leu Cys Glu Ser Asp  
145 150 155 160

Asp Lys Glu Gly Glu Arg Ile Asp Ser Asp Phe Ser Arg Asp Ile Cys  
165 170 175

Val Leu Gln Pro His Arg Gly Lys Arg Glu Cys Leu Tyr Thr Gly Phe  
180 185 190

Gln Leu Ala Lys Met Asp Pro Ser Val Asn Ala Val Val Leu Ile Asp  
195 200 205

Ser Asp Thr Val Leu Glu Lys Asp Ala Ile Leu Glu Val Val Tyr Pro  
210 215 220

Leu Ala Cys Asp Pro Glu Ile Gln Ala Val Ala Gly Glu Cys Lys Ile  
225 230 235 240

Trp Asn Thr Asp Thr Leu Leu Ser Leu Leu Val Ala Trp Arg Tyr Tyr  
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Ser Ala Phe Cys Val Glu Arg Ser Ala Gln Ser Phe Phe Arg Thr Val  
260 265 270

Gln Cys Val Gly Gly Pro Leu Gly Ala Tyr Lys Ile Asp Ile Ile Lys  
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Glu Ile Lys Asp Pro Trp Ile Ser Gln Arg Phe Leu Gly Gln Lys Cys  
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Thr Tyr Gly Asp Asp Arg Arg Leu Thr Asn Glu Ile L u Met Arg Gly



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Tyr Phe Val Leu Tyr Thr Phe Val Tyr Phe Phe Cys Met Ile Pro Ala  
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Gly Val Tyr Ser Ile Val His Asn Trp Met Phe Asp Trp Asn Ser Leu  
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